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**The role of stem cells and progenitors in the genesis of medulloblastoma.**

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**Public Summary:**

Cancer results from dysregulation of growth and survival pathways in normal stem cells and progenitors. Identifying the cells from which a tumor arises can facilitate the development of animal models and point to novel targets for therapy. Medulloblastoma is an aggressive tumor of the cerebellum that occurs predominantly in children. Recent genomic studies suggest that medulloblastoma consists of 4 major subgroups, each with distinct mutations and signaling pathway deregulations, and each potentially arising from distinct populations of stem cells and progenitors. Here we review the major types of progenitor cells in the cerebellum and discuss their role in the genesis of medulloblastoma.

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